

AMENDMENT TO THE CLAIMS:

1. (Currently amended) An injection nozzle for an internal combustion engine, the injection nozzle comprising;

a nozzle body (16) provided with a bore defining a valve seating surface (14) having a seat cone angle (ϑ_S);

a valve member (10) which is moveable within the bore,

wherein the valve member (10) includes an upstream seat region (22) defining an upstream cone angle (ϑ_B), the upstream cone angle (ϑ_B) and the seat cone angle (ϑ_S) together defining an upstream differential angle (Δ_1) between them, and a downstream seat region (20, 24) defining a downstream cone angle (ϑ_A), the downstream cone angle (ϑ_A) and the seat cone angle (ϑ_S) together defining a downstream differential angle (Δ_2) between them,

the valve member (10) further comprising an annular ridge (40) that includes an upstream ridge region (44) protruding from ~~at least one of~~ the surface of the upstream seat region (22) and an adjacent downstream ridge region (46) protruding from the surface of the downstream seat region (20, 24) ~~and being~~ , said annular ridge (40) disposed immediately downstream of the upstream seat region (22), ~~wherein the protruding annular ridge (40) includes an upstream ridge region (44) and an adjacent downstream ridge region (46)~~, said protruding annular ridge (40) defining an annular seating line (112) at the intersection of the upstream and downstream ridge regions (44,46), said seating line (112) having a seat diameter, the seating line (112) being engageable with the valve seating surface (14) to control fuel injection from the nozzle body (16).

2. (Canceled)

3. (Previously presented) The injection nozzle as claimed in claim 1, wherein the valve member (10) includes a circumferential groove (48) arranged downstream of the downstream ridge region (46) and immediately upstream of a further region (24), wherein a lower edge of the circumferential groove and the further region (24) define an intersection which defines, together with the seating surface (14), a radial clearance that is sufficiently small so that a lower portion of the downstream ridge region (46) defines a load bearing surface for the valve member (10).

4. (Previously presented) The injection nozzle as claimed in claim 1, wherein the upstream ridge region (44) is immediately downstream of, or forms an integral part of, the upstream seat region (22) and wherein the downstream ridge region (46) is immediately upstream of, or forms an integral part of, the downstream seat region (20).

5. (Previously presented) The injection nozzle as claimed in claim 1, wherein the upstream differential angle ($\Delta 1$) is smaller than the downstream differential angle ($\Delta 2$).

6. (Previously presented) The injection nozzle as claimed in claim 1, wherein the upstream differential angle ($\Delta 1$) is greater than the downstream differential angle ($\Delta 2$).

7. (Previously presented) The injection nozzle as claimed in claim 1, wherein the upstream differential angle ($\Delta 1$) is selected to be substantially the same as the downstream differential angle ($\Delta 2$) so that, regardless of wear of the seating line (112), in use, the seat diameter maintains a substantially constant value.

8. (Previously presented) The injection nozzle as claimed in claim 1, wherein the protruding annular ridge (40) is shaped so that the upstream region (22) defines, together with the seating surface (14), a radial clearance of no more than 10 μm .

9. (Previously presented) The injection nozzle as claimed in claim 1, wherein the protruding annular ridge (40) is shaped so that a region (24) of the valve member (10) adjacent

thereto on a downstream side of the seating line (112) defines, together with the seating surface (14), a radial clearance of no more than 10 μm .

10. (Previously presented) The injection nozzle as claimed in claim 9, wherein the region adjacent to the protruding annular ridge (40) on the downstream side of the seating line (112) is a valve tip region (24).

11. (Original) The injection nozzle as claimed in claim 10, wherein the valve tip region (24) includes a chamfered tip (28).

12. (Previously presented) The injector nozzle as claimed in claim 1, being one of (i) VCO-type or (ii)sac-type.